

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): T. SHIBA, et al

Serial No.: Not yet assigned

Filed: December 9, 2003

For: SPECTRUM SPREADING COMMUNICATION DEVICE AND  
COMMUNICATION SYSTEM

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §1.97 & 1.98**

**MS DD**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 9, 2003

Sir:

In the matter of the above-identified application, this Information Disclosure Statement is being submitted with the following citation as specified in 37 CFR §1.97(d).

"A copy of any patent, publication or other information listed in an Information Disclosure Statement is not required to be provided if it was previously cited by or submitted to the Office in a prior application, provided that the prior application is properly identified in the statement and relied upon for an earlier filing date under 35 U.S.C. §120."

Applicant(s) are submitting herewith a copy of Form PTO-1449 which list documents cited in parent application(s) Serial No. 09/558,373, filed April 26, 2000, and Serial No. 08/875,182, filed July 21, 1997, now U.S. Patent No. 6,134,264.

It is respectfully requested that this information disclosure statement be considered by the Examiner.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus Deposit Account No. 01-2135 (500.35527CX2) please credit any excess fees to such deposit account.

Respectfully submitted,



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<b>FORM PTO-1449</b> U.S. Department of Commerce (Rev. 4/92) Patent and Trademark Office  <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO. <b>500.35527CX2</b>	SERIAL NO. <b>Not yet assigned</b>
	APPLICANT <b>T. SHIBA, et al</b>	
	FILING DATE <b>December 9, 2003</b>	GROUP <b>2634</b>

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5 1 4 4 6 3 9	9/92	Uchida et al	375	208	
	4 0 9 5 2 2 5	6/78	Erikmats	342	195	
	5 3 7 5 1 4 1	12/94	Takahashi	375	208	
	5 3 8 1 4 4 4	1/95	Tajima	375	200	
	5 4 8 8 6 2 9	1/96	Takahashi et al	375	206	
	5 4 9 9 2 6 5	3/96	Dixon et al	375	200	
	5 5 3 0 6 9 7	6/96	Watanabe	370	342	
	5 6 4 6 9 6 4	7/97	Ushirokawa et al	375	346	
	5 2 1 8 6 2 0	6/93	Mori et al	375	142	
	5 5 7 6 5 9 0	11/96	Ohnishi et al	310	359	
	5 2 9 4 8 5 8	3/94	Nakahata et al	310	313A	

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLAS S	SUBCLAS S	ABSTRAC T
					Y NO
3 1 7 4 8 3 5	7/91	Japan			x x

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	S. Minagawa, et al, "Sezawa Wave Correlator Using Monolithic ZnO/SiO <sub>2</sub> /Si Structure" Proceedings of IEEE 1984 Ultrasonics Symposium, pp. 298-302, Dallas, TX.
	Niitsuma, et al, "Development of Zero-Bias and Surface Mounting ZnO/Si/ SAW Convolver" Technical Report of IEICE, SST93-44.
	J. Gau, et al, "SAW Barker Code Correlator with Improved Sidelobes, IEEE 1985 Ultrasonics Symposium, pp. 145-145.

EXAMINER

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EXAMINER: Initial if citation is considered, draw line through citation if not in conformance and not considered.  
 Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])

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EXAMINER INITIAL		DOCUMENT NUMBER								DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6	1	3	4	2	6	4						
		6	1	3	4	2	6	4	10/00	Shiba et al				

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	ABSTRACT	
														YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		T. Shiba, "Low Insertion Loss Surface Acoustic Wave Matched Filter with Low Sidelobe Sequence and its Application for Spread Spectrum Communication" JPN, J. Appl. Phys. Vol. 35, Part 1, No. 5B, (May 1996), pp. 3024-3027.
		T. Shiba, "Low Loss Saw Matched Filters with Low Sidelobe Sequences and Spread Spectrum Application", Multimedia Systems R&D Division, Research Institute of Electrical Communication, ISSSTA, 1996.

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